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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/791,238 | 03/01/2004 | Robert J. Desiderio | 330235.00008 | 3649 |
| 26707 | 7590 | 02/20/2009 | EXAMINER | |
| QUARLES & BRADY LLP | | | MONIKANG, GEORGE C | |
| RENAISSANCE ONE | | | | |
| TWO NORTH CENTRAL AVENUE | | | ART UNIT | PAPER NUMBER |
| PHOENIX, AZ 85004-2391 | | | 2614 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------------|----------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/791,238 | DESIDERIO, ROBERT J. |
| | Examiner | Art Unit |
| | GEORGE C. MONIKANG | 2614 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 December 2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
 - 4a) Of the above claim(s) 8, 14 and 24 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7,9-13,15-23 and 25-34 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1-7, 9-13, 15-23 & 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al, US Patent 7,024,006 B1, in view of Sondemeyer, US Patent 4,290,335 and further in view of Miyagishima et al, US Patent 6,696,633 B2.

Re Claim 1, Schwartz et al discloses a parametric equalizer, comprising: an audio filter having a plurality of electronic components for filtering a first audio signal (*fig. 2a; col. 3, lines 21-39; abstract*); a first control mechanism having a variable resistive element coupled to a first node within the plurality of electronic components for controlling a center frequency of the audio filter for modifying a center frequency of the first audio signal (*col. 2, line 66 through col. 3, line 15*); and a second control mechanism (*figs. 2a & 2b; col. 3, lines 21-39*), but fails to disclose the second control mechanism consisting of a rotary control knob mechanically coupled to wiper arms of first and second commonly controlled variable resistive elements, the first and second commonly controlled variable resistive elements being respectively coupled to second and third nodes within the plurality of electronic components, wherein the first and second commonly controlled variable resistive elements jointly control a signal level and a bandwidth of the audio filter for simultaneously modifying a signal level and a

bandwidth of the first audio signal, the rotary control knob being configured to rotate in a first direction to move the wiper arms of the first and second commonly controlled variable resistive elements in corresponding first directions to simultaneously increase the signal level and increase the bandwidth of the first audio signal and the rotary control knob being configured to rotate in a second direction to move the wiper arms of the first and second commonly controlled variable resistive elements in corresponding second directions to simultaneously decrease the signal level and decrease the bandwidth of the first audio signal. However, Miyagishima et al discloses a control section with a parametric equalizer 208 that can control the center frequency, gain and bandwidth (Q) (*Miyagishima et al, col. 15, lines 46-55: to be able to control the center frequency, gain and bandwidth with one parametric equalizer, there are a plurality of variable resistors for each of center frequency, gain and bandwidth associated with the parametric equalizer*). Miyagishima also fails to disclose a rotary control knob mechanically coupled to wiper arms of first and second commonly controlled variable resistive elements (*Sondermeyer, col. 3, line 46 through col. 4, line 5*), the first and second commonly controlled variable resistive elements being respectively coupled to second and third nodes within the plurality of electronic components (*Sondermeyer, col. 3, line 46 through col. 4, line 5*), wherein the first and second commonly controlled variable resistive elements jointly control signal elements (*Sondermeyer, col. 3, line 46 through col. 4, line 5*), the rotary control knob being configured to rotate in a first direction to move the wiper arms of the first and second commonly controlled variable resistive elements in corresponding first direction and second direction (*Sondermeyer, col. 3, line 46 through col. 4, line 5*).

col. 3, line 46 through col. 4, line 5) as taught in Sondemeyer. It would have been obvious to modify the parametric equalizer of Schwartz et al with a control knob that has the ability to mechanically control wiper arms of first and second commonly controlled variable resistive elements wherein the first and second commonly controlled variable resistive elements jointly control signal elements (Sondermeyer, col. 3, line 46 through col. 4, line 5) as taught in Sondemeyer for the purpose of having few control knobs on the parametric equalizer. It would have been obvious as well to modify the parametric equalizer of Schwartz et al by using the mechanically control knob of Sondemeyer to control the bandwidth along with the signal level as taught in Miyagishima et al (Miyagishima et al, col. 15, lines 46-55: to be able to control the center frequency, gain and bandwidth with one parametric equalizer, there are a plurality of variable resistors for each of center frequency, gain and bandwidth associated with the parametric equalizer) for the purpose of being able to obtain smoother sounds.

Re Claim 2, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al, disclose the parametric equalizer of claim 1, wherein the first control mechanism includes a potentiometer having a terminal coupled to the first node within the plurality of electronic components (Schwartz et al, col. 8, lines 16-34).

Claims 3-4 have been analyzed and rejected according to claim 1.

Re Claim 5, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the parametric equalizer of claim 1, wherein the plurality of electronic components includes a gain amplifier, the first resistive element of the second

control mechanism being coupled to an input of the gain amplifier for adjusting the signal level of the audio filer (Schwartz et al, col. 3, lines 50-67).

Re Claim 6, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the parametric equalizer of claim 1, wherein the plurality of electronic components includes a summing node, the second resistive element of the second control mechanism being coupled to the summing node for adjusting the bandwidth of the gain amplifier (Schwartz et al, figs 2a & 2b: 23; col. 3, lines 21-39).

Claims 7, 9, 11-13 & 15 have been analyzed and rejected according to claim 1.

Re Claim 10, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the audio system of claim 9, wherein the second control interface includes a variable resistive element coupled to a first node within the plurality of electronic components (Schwartz et al, col. 8, lines 16-34).

Re Claim 16, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the audio system of claim 7, further including a guitar for generating audio signals which are routed to the parametric equalizer (Schwartz et al, col. 9, lines 21-25).

Re Claim 17, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the audio system of claim 16, further including a pre-amplifier coupled for receiving the audio signals from the guitar (Schwartz et al, fig. 5: R1 & AR2; col. 8, lines 17-34).

Re Claim 18, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the audio system of claim 17, further including a power

amplifier having an input coupled to an output of the pre-amplifier (*Schwartz et al, fig. 5: AR3*).

Re Claim 19, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the audio system of claim 18, further including a speaker system having an input coupled to an output of the power amplifier (*Schwartz et al, col. 9, lines 57-61*).

Re Claim 20, the combined teachings of Schwartz et al, Sondemeyer and Miyagishima et al disclose the audio system of claim 7, further including a bass guitar for generating audio signals which are routed to the parametric equalizer (*Schwartz et al, col. 9, lines 43-52*).

Claim 21 has been analyzed and rejected according to claim 18.

Claims 22-23 & 25-31 have been analyzed and rejected according to claim 1.

Claim 32 has been analyzed and rejected according to claim 16.

Claim 33 has been analyzed and rejected according to claim 17.

Claim 34 has been analyzed and rejected according to claim 19.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE C. MONIKANG whose telephone number is (571)270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George C Monikang/
Examiner, Art Unit 2614

2/15/2009

Vivian Chin/
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